Zhihua Wang

List of Publications by Year
in descending order

57 papers	3,141 citations	136950 32 h-index	155660 55 g-index
57 all docs	57 docs citations	57 times ranked	3517 citing authors

#	Article	IF	Citations
1	Porous ZnO Polygonal Nanoflakes: Synthesis, Use in High-Sensitivity NO_2 Gas Sensor, and Proposed Mechanism of Gas Sensing. Journal of Physical Chemistry C, 2011, 115, 12763-12773.	3.1	350
2	One-Step Synthesis of Co-Doped In_2O_3 Nanorods for High Response of Formaldehyde Sensor at Low Temperature. ACS Sensors, 2018, 3, 468-475.	7.8	199
3	Highly Sensitive and Selective Ethanol Sensor Fabricated with In-Doped 3DOM ZnO. ACS Applied Materials & Interfaces, 2016, 8, 5466-5474.	8.0	179
4	Bifunctional Bi12O17Cl2/MIL-100(Fe) composites toward photocatalytic Cr(VI) sequestration and activation of persulfate for bisphenol A degradation. Science of the Total Environment, 2021, 752, 141901.	8.0	175
5	Construction of direct Z-scheme Bi5O7I/UiO-66-NH2 heterojunction photocatalysts for enhanced degradation of ciprofloxacin: Mechanism insight, pathway analysis and toxicity evaluation. Journal of Hazardous Materials, 2021, 419, 126466.	12.4	169
6	Highly sensitive NO2 gas sensor of ppb-level detection based on In2O3 nanobricks at low temperature. Sensors and Actuators B: Chemical, 2018, 262, 655-663.	7.8	151
7	Manipulating the Defect Structure (V_O) of In_2O_3 Nanoparticles for Enhancement of Formaldehyde Detection. ACS Applied Materials & Interfaces, 2018, 10, 933-942.	8.0	146
8	Controllable Defect Redistribution of ZnO Nanopyramids with Exposed {101̄1} Facets for Enhanced Gas Sensing Performance. ACS Applied Materials & Interfaces, 2015, 7, 308-317.	8.0	108
9	Atomically dispersed Pt (II) on WO3 for highly selective sensing and catalytic oxidation of triethylamine. Applied Catalysis B: Environmental, 2019, 256, 117809.	20.2	103
10	Synthesis, characterization and alcohol-sensing properties of rare earth doped In2O3 hollow spheres. Sensors and Actuators B: Chemical, 2013, 177, 1180-1188.	7.8	93
11	Pd loading induced excellent NO 2 gas sensing of 3DOM In 2 O 3 at room temperature. Sensors and Actuators B: Chemical, 2018, 263, 218-228.	7.8	90
12	Electron compensation in p-type 3DOM NiO by Sn doping for enhanced formaldehyde sensing performance. Journal of Materials Chemistry C, 2017, 5, 3254-3263.	5.5	88
13	Atomically Dispersed Au on In_2O_3 Nanosheets for Highly Sensitive and Selective Detection of Formaldehyde. ACS Sensors, 2020, 5, 2611-2619.	7.8	67
14	α-Fe2O3/NiO heterojunction nanorods with enhanced gas sensing performance for acetone. Sensors and Actuators B: Chemical, 2020, 318, 128191.	7.8	65
15	Mg–Al–carbonate layered double hydroxides as a novel catalyst of luminol chemiluminescence. Chemical Communications, 2011, 47, 5479-5481.	4.1	62
16	Structural and electronic engineering of 3DOM WO_3 by alkali metal doping for improved NO_2 sensing performance. Nanoscale, 2016, 8, 10622-10631.	5.6	62
17	Carbonate interlayered hydrotalcites-enhanced peroxynitrous acid chemiluminescence for high selectivity sensing of ascorbic acid. Analyst, The, 2012, 137, 1876.	3.5	60
18	Sensitization of Pd loading for remarkably enhanced hydrogen sensing performance of 3DOM WO3. Sensors and Actuators B: Chemical, 2018, 262, 577-587.	7.8	58

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19	Photocatalytic degradation of DOM in urban stormwater runoff with TiO2 nanoparticles under UV light irradiation: EEM-PARAFAC analysis and influence of co-existing inorganic ions. Environmental Pollution, 2018, 243, 177-188.	7.5	53
20	Orderly Arranged Fluorescence Dyes as a Highly Efficient Chemiluminescence Resonance Energy Transfer Probe for Peroxynitrite. Analytical Chemistry, 2015, 87, 3412-3418.	6.5	51
21	Assay of multiplex proteins from cell metabolism based on tunable aptamer and microchip electrophoresis. Biosensors and Bioelectronics, 2015, 63, 105-111.	10.1	47
22	Highly Stable and Conductive Multicationic Poly(biphenyl indole) with Extender Side Chains for Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2021, 4, 6154-6165.	5.1	47
23	Humidity-Sensing Performance of 3DOM WO_3 with Controllable Structural Modification. ACS Applied Materials & Interfaces, 2018, 10, 3776-3783.	8.0	45
24	Effects of rare earth element doping on the ethanol gas-sensing performance of three-dimensionally ordered macroporous In_2O_3. RSC Advances, 2016, 6, 45085-45092.	3.6	44
25	The effects of Au species and surfactant on the catalytic reduction of 4-nitrophenol by $Au@SiO_2$. Journal of Materials Chemistry A, 2014, 2, 20374-20381.	10.3	41
26	Detection of hydrogen peroxide in rainwater based on Mg-Al-carbonate layered double hydroxides-catalyzed luminol chemiluminescence. Analyst, The, 2011, 136, 4986.	3.5	37
27	Chemiluminescence flow biosensor for glucose using Mg-Al carbonate layered double hydroxides as catalysts and buffer solutions. Biosensors and Bioelectronics, 2012, 38, 284-288.	10.1	36
28	Universal Chemiluminescence Flow-Through Device Based on Directed Self-Assembly of Solid-State Organic Chromophores on Layered Double Hydroxide Matrix. Analytical Chemistry, 2013, 85, 2436-2442.	6.5	36
29	Enhanced acetone sensing performance of Au nanoparticle modified porous tube-like ZnO derived from rod-like ZIF-L. Dalton Transactions, 2018, 47, 9014-9020.	3.3	35
30	Multifunctional sandwich-like mesoporous silica–Fe_3O_4–graphene oxide nanocomposites for removal of methylene blue from water. RSC Advances, 2015, 5, 39964-39972.	3.6	34
31	Elastic and durable multi‐cation‐crosslinked anion exchange membrane based on poly(styrene‐*b*‐(ethylene‐*co*‐butylene)‐*b*‐styrene). Journal of Polymer Science, 2020, 58, 2181-2196.	3.5	34
32	Facile preparation of rod-like Au/In2O3 nanocomposites exhibiting high response to CO at room temperature. Sensors and Actuators B: Chemical, 2017, 243, 516-524.	7.8	33
33	Cobalt oxide nanorods with special pore structure for enhanced ethanol sensing performance. Journal of Colloid and Interface Science, 2018, 531, 320-330.	9.4	32
34	Selective Catalytic Oxidation of Methane to Methanol in Aqueous Medium over Copper Cations Promoted by Atomically Dispersed Rhodium on TiO_2. Angewandte Chemie - International Edition, 2022, 61, e202201540.	13.8	29
35	Au-modified three-dimensionally ordered macroporous ZnO:In for high-performance ethanol sensors. Journal of Materials Chemistry C, 2020, 8, 2812-2819.	5.5	28
36	Metal–organic framework derived Au@ZnO yolk–shell nanostructures and their highly sensitive detection of acetone. RSC Advances, 2016, 6, 29727-29733.	3.6	26

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37	Evolution of biogenic amine concentrations in foods through their induced chemiluminescence inactivation of layered double hydroxide nanosheet colloids. Biosensors and Bioelectronics, 2014, 60, 237-243.	10.1	23
38	Fine-tuning the structure of cubic indium oxide and their ethanol-sensing properties. Sensors and Actuators B: Chemical, 2014, 193, 669-678.	7.8	23
39	Atomically dispersed Pt on 3DOM WO3 promoted with cobalt and nickel oxides for highly selective and highly sensitive detection of xylene. Sensors and Actuators B: Chemical, 2019, 297, 126772.	7.8	21
40	High specific surface area LaMO$_3$ (M = Co, Mn) hollow spheres: synthesis, characterization and catalytic properties in methane combustion. RSC Advances, 2014, 4, 58699-58707.	3.6	15
41	Insights into the effect of Au particle size on triethylamine sensing properties based on a Au–ZnO nanoflower sensor. Journal of Materials Chemistry C, 2022, 10, 3318-3328.	5.5	15
42	Investigation on polyvinyl-alcohol-based rapidly gelling hydrogels for containment of hazardous chemicals. RSC Advances, 2016, 6, 71425-71430.	3.6	14
43	Mass Spectrometry Genotyping of Human Papillomavirus Based on High-Efficiency Selective Enrichment of Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 41178-41184.	8.0	14
44	Atomically Dispersed Pt on Three-Dimensional Ordered Macroporous SnO$_2$ for Highly Sensitive and Highly Selective Detection of Triethylamine at a Low Working Temperature. ACS Applied Materials & Interfaces, 2022, 14, 13440-13449.	8.0	14
45	Facile synthesis of In 2 O 3 nanoparticles with high response to formaldehyde at low temperature. International Journal of Applied Ceramic Technology, 2019, 16, 1570-1580.	2.1	13
46	The important role of quinic acid in the formation of phenolic compounds from pyrolysis of chlorogenic acid. Journal of Thermal Analysis and Calorimetry, 2013, 114, 1231-1238.	3.6	11
47	Luminol chemiluminescence actuated by modified natural sepiolite material and its analytical application. Analytical Methods, 2015, 7, 2779-2785.	2.7	11
48	Three-dimensional ordered macroporous In2O3-supported Au for high-performance ethanol sensing. RSC Advances, 2015, 5, 99018-99022.	3.6	9
49	Competitive adsorption on gold nanoparticles for human papillomavirus 16 L1 protein detection by LDI-MS. Analyst, The, 2019, 144, 6641-6646.	3.5	9
50	Biomimetic synthesis of calcium-strontium apatite hollow nanospheres. Science China Chemistry, 2010, 53, 1723-1727.	8.2	7
51	Alcohol Sensing Properties of Er-Doped In2O3 Hollow Spheres. Integrated Ferroelectrics, 2012, 138, 117-122.	0.7	6
52	Functionalization of Flower-Like ZnO Nanostructures With Au@CuO Nanoparticles for Detection of Ethanol. IEEE Sensors Journal, 2014, 14, 1797-1804.	4.7	5
53	Humidity-Independent, Highly Sensitive and Selective NO$_2$ Sensor Based on In$_2$O$_3$ Nanoflowers Decorated With Graphite Nanoflakes. IEEE Sensors Journal, 2022, 22, 14753-14761.	4.7	5
54	Determination of cadmium in paint samples by graphite furnace atomic absorption spectrometry with optical temperature control. Talanta, 2007, 72, 1723-1727.	5.5	4

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55	Enantiomeric Separation of Two Antiparkinsonian Drugs by Electrokinetic Chromatography Using Dextran Sulfate. Chromatographia, 2009, 70, 817-824.	1.3	4
56	Selective Catalytic Oxidation of Methane to Methanol in Aqueous Medium over Copper Cations Promoted by Atomically Dispersed Rhodium on TiO_2. Angewandte Chemie, 0, , .	2.0	3
57	Oxidative treatment of fentanyl compounds in water by sodium bromate combined with sodium sulphite. Water Science and Technology, 2015, 72, 38-44.	2.5	2